



LABS FOR THE 21ST CENTURY

# Labs21 Pilot Project Description Guidelines

As part of each Labs21 Pilot Partner agreement, participating organizations are required to submit a description of their proposed pilot project. The description, which should be no longer than a few pages, should follow the format provided below:

## I. Anticipated Goals

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This section should clearly outline the goals of the participating organization. Labs21 Partners are encouraged to adopt voluntary energy and water reduction goals designed to reduce the environmental impacts of their laboratory facilities. In developing their goals, Partners must:

- Pledge to exceed standard practice as characterized by an ASHRAE-compliant base case design by a self-designated percentage in new construction or
- Pledge to reduce energy consumption on a per unit basis by a self-designated percentage in renovations and
- Pledge to reduce peak energy demand by a self-designated percentage under either scenario.

## II. Scope of the Project

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This section should briefly describe the scope of the proposed pilot project. It should outline the organization's plans to design a new laboratory or retrofit an existing facility. Building on the facility-specific information provided in the Pilot Partner agreement, this section should include information regarding the facility's current and projected energy and water use and planned energy and water features or upgrades. It also should address whether the Partner will use the experiences and lessons gained during the Labs21 pilot project to benefit other future projects.

This section should discuss the organization's willingness to adopt the "Labs21 Approach" toward how the facility is designed, engineered, and constructed. Specifically, Partners must indicate their willingness to adopt each of the following elements of the Labs21 approach. Partners should refer to the attached description of the Labs21 approach for background information on each of these elements.

- Assess opportunities from a "whole buildings" approach.
- Use lifecycle cost analysis as an important decision-making tool.
- Incorporate a comprehensive, whole building commissioning process into new construction and retrofit projects.
- Employ a range of energy and water efficiency strategies.
- Measure energy and water consumption and track emission reductions.
- Evaluate on-site power generation, combined heat and power technologies, and renewable power purchases.



- Build with “green” construction materials.
- Promote energy and water efficiency efforts.
- Expand beyond the laboratory building.

### **III. Type of Assistance Requested**

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This section should state the type, frequency, and level of assistance requested from the Labs21 technical team. Opportunities for technical assistance include, but are not limited to, the following:

- Planning a senior management briefing on the advantage of improving a laboratory’s energy and water efficiency.
- Developing an energy assessment protocol.
- Assisting in energy assessments.
- Reviewing the results of an energy audit.
- Meeting with an architect or A/E firm to plan a new laboratory or expand an existing laboratory.
- Reviewing an existing design.

### **IV. Project Schedule**

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This section should list the major milestones and timetable for the proposed project, including the following:

- Project initiation.
- Preliminary design and review.
- Major design and construction activities.
- Project completion.

### **V. Plans for Documenting Success**

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This section should identify how the partner plans to document and promote their participation in Labs21. Partners might consider the following opportunities:

- Describing the project in annual corporate reports.
- Producing advertisements or announcements in organizational newsletters.
- Writing or contributing to articles or best practices documenting project success.
- Participating in Labs21-related conferences or speaking engagements.